

CLAIMS

- 1 A method for producing mechanical parts and objects,
particularly prototypes, from a specific computer-
aided design of the type comprising the successive
5 phases of:
- 6 - manufacturing parts in elemental layers or laminations;
 - building up the collection of layers;
 - assembling the layers;
- 10 16 said laminations resulting from a prior breakdown of the part along planes and one or more defined steps, characterized in that the unitary laminations determined by the breakdown of the part employing specific software and machined accordingly, essentially comprise:
- 15 - a central portion (8) effectively corresponding to the lamination with the desired shape and desired thickness for obtaining the finished part,
 - 20 - an outer portion (11) of roughly the same thickness, at least partially surrounding said central portion,
 - frangible bridges (10) connecting said central and outer portions together.
- 25 2. The method as claimed in claim 1, characterized in that each lamination comprises circular orifices (16) for positioning the bridges and assembling them together
- 30 3. The method as claimed in claim 1, characterized in that each lamination comprises orifices (16') with polygonal geometric cross section, for positioning the bridges and assembling them together.
- 35 4. The method as claimed in any one of claims 1 to 3, characterized in that the laminations are assembled to form a self-supporting structure.

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5. The method as claimed in any one of claims 1 to 3, characterized in that the laminations are assembled on a mount plate (19) equipped with bores (20).
- 5 6. The method as claimed in any of claims 1 to 5, characterized in that assembly is achieved using a single shaft (17, 21) and an insert rod (22).
- 10 7. An elemental lamination for producing a mechanical part, particularly a prototype, by assembly, characterized in that it is obtained by implementing a method as claimed in any one of claims 1 to 6.
8. *MO* A mechanical part, particularly a prototype, characterized in that it is obtained by assembling laminations as claimed in claim 7.

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